

CLAIMS

1. A system, comprising:

a body portion;

an extending part with a proximal end piece and a distal end piece and wherein the proximal end piece is coupled to the body portion;

at least one receiving body in communication with the extending part; and

a control circuit coupled to the receiving unit or the extending part.

2. The system of Claim 1, wherein the extending part further comprises:

a plurality of sliding pieces.

3. The system of Claim 2, wherein the plurality of sliding pieces further comprises:

inwardly sliding or outwardly sliding pieces.

4. The system of Claim 2, wherein the plurality of sliding pieces further comprises:

a uniform, increasing, or decreasing size or dimension for traveling the interior of a blood vessel.

5. The system of Claim 2, wherein the plurality of sliding pieces comprises:

a hollow portion.

6. The system of Claim 2, wherein the plurality of sliding pieces further comprises:

a size or dimension wherein the diameter of a distal sliding piece is less than the size or dimension of an adjacent proximal sliding piece.

7. The system of Claim 2 or 6, wherein the plurality of sliding pieces further comprises:

a twofold decrease in a diameter of each of a successive distal sliding piece.

8. The system of Claim 2, wherein the plurality of sliding pieces further comprises:

a distal end and a proximal end and wherein the distal end of each sliding piece is less than the size or dimension of the proximal end of each sliding piece.

9. The system of Claim 1, wherein the system further comprises:

a pump, or a source of pressure coupled to the extending part.

10. The system of Claim 1, wherein the system further comprises:

a motor or an actuator coupled to the extending part.

11. The system of Claim 1, wherein the system comprises:

a polymer operative for converting a first form of energy to a second form of energy.

12. The system of Claim 11, wherein the system comprises:

a polymer operative for converting electrical energy to mechanical energy.

13. The system of Claim 11, wherein the system comprises:

- a polymer operative for converting mechanical energy to electrical energy.
14. The system of Claim 1, wherein the extending part comprises:
- a polymer operative for converting one form of energy to a new form of energy.
15. The system of Claim 1, wherein the extending part comprises:
- a polymer that converts one form of energy to a new form of energy operative for moving fluid.
16. The system of Claim 1, wherein the extending part comprises
- a polymer that converts one form of energy to a new form of energy operative for providing a wave motion and moving a fluid.
17. The system of Claim 1, wherein the system further comprises:
- an imager, a pressure sensor, a temperature sensor, a chemical sensor, a gas sensor, an electrolyte sensor, a composition sensor, a concentration sensor, or a flow sensor coupled to the extending part.
18. The system of Claim 1, wherein the system further comprises:
- a wireless interface coupled to the control circuit.
19. The system of Claim 1, wherein the system further comprises:
- a wireless data transmitter coupled to the control circuit or the extended part.

20. The system of Claim 1, wherein the system further comprises:

a wireless data receiver, or a wireless data controller coupled to the extended part or the control circuit.

21. The system of Claim 1, wherein the at least one receiving body comprises:

a source of a chemical, a chemical compound, a protein, a lipoprotein, a glycoprotein, a sugar, a lipid, an antigen, an antibody, a cytokine, a peptide, a neurotransmitter, a hormone, an ion, a messenger molecule, a nucleic acid, an engineered nucleic acid, a nucleic acid vector, a drug, a cell, a cell fragment, a cell organelle, a liposome, a pharmaceutical agent, a biological material, or a biological fraction internal or external to the at least one receiving body.

22. The system of Claim 1, wherein the at least one receiving body comprises:

a source of two or more of a chemical, a chemical compound, a protein, a lipoprotein, a glycoprotein, a sugar, a lipid, an antigen, an antibody, a cytokine, a peptide, a neurotransmitter, a hormone, an ion, a messenger molecule, a nucleic acid, an engineered nucleic acid, a nucleic acid vector, a drug, a cell, a cell fragment, a cell organelle, a liposome, a pharmaceutical agent, a biological material, or a biological fraction internal or external to the at least one receiving body.

23. The system of Claim 1, wherein the system further comprises:

a functional tool coupled to the extended part.

24. The system of Claim 23, wherein the functional tool further comprises:

a tool positioner.

25. The system of Claim 23, wherein the functional tool further comprises:

a tool for ablating, degrading or liquefying a cell, a mass of cells, a tissue, or an assembly of biological materials exhibiting shear strength.

26. The system of Claim 23, wherein the functional tool further comprises:

a second control circuit for guiding the functional tool coupled to the control circuit.

27. The system of Claim 1, wherein the extended part further comprises:

a source of an electric charge or electromagnetic radiation coupled or carried by the extended part.

28. The system of Claim 1, wherein the extended part further comprises:

a device for fully, partially blocking, guiding, or shunting a liquid flow.

29. The system of Claim 1, wherein the system further comprises:

a tool for cauterizing or sealing a cell, a mass of cells, a tissue, or an assembly of biological materials exhibiting shear strength coupled to or carried by the extended part.

30. The system of Claim 1, wherein the system further comprises:

a fluid dispenser coupled to or carried by the extended part.

31. The system of Claim 1, wherein the system further comprises:

a stent coupled to or carried by the extended part.

32. The system of Claim 1, wherein the control circuit comprises:

a configuration operative for controlling, guiding or positioning the extended part.

33. The system of Claim 1, wherein the control circuit comprises:

a processor, a feedback circuit, or a logic circuit.

34. The system of Claim 1, wherein the control circuit further comprises:

a processor further comprising a stored software or firmware program cooperative with the processor.

35. The system of Claim 1, wherein the system further comprises:

a size, composition, shape, power dissipation level, or a configuration for implantation in an animal.

36. The system of Claim 35, wherein the animal comprises:

a human.

37. The system of Claim 1, wherein the system further comprises:

a configuration for placing in a location and operative for monitoring or treating one or more physiological variables.

38. The system of Claim 37, wherein the location comprises:

a circulatory system, an abdominal aorta, a vena cava, or a nervous system.

39. The system of Claim 1, wherein the system comprises:

a configuration for monitoring or treating a response in an animal.

40. The system of Claim 1, wherein the system further comprises:

a medicinal agent, a pharmaceutical agent, a therapeutic device or assembly carried by the extending part to a location in an animal.

41. The system of Claim 1, wherein the system comprises:

a configuration for communicating exterior to a patient.

42. A method of making a device for perfusion management, comprising:

forming a hollow part for storing a receivable;

coupling a flexible finger to the hollow part and configuring the flexible finger for extending from the hollow part to a location in an animal; and

coupling the flexible finger to the hollow portion and to a control system including logic or software operable for delivering the receivable from the hollow part to the location in the animal.

43. The method of Claim 42, wherein the flexible finger further comprises:

a plurality of hollow sliding parts.

44. The method of Claim 43, wherein the flexible finger further comprises:

inwardly or outwardly sliding parts.

45. The method of Claim 43 wherein the method further comprises:

forming the flexible finger including the plurality of hollow sliding parts with a uniform, increasing, or decreasing size or dimensions for traveling the interior of a blood vessel.

46. The method of Claim 43, wherein the method further comprises:

forming the flexible finger including the plurality of hollow sliding parts with a size or dimension wherein the diameter of a distal hollow sliding part is less than the size or dimension of an adjacent proximal hollow sliding part.

47. The method of Claim 43, wherein the method further comprises:

forming a two-fold decrease in a diameter of each of a successive hollow sliding part.

48. The method of Claim 43, wherein the method further comprises:

forming the flexible finger including the plurality of hollow sliding parts wherein the plurality of hollow sliding parts comprises a distal end and a proximal end and wherein the distal end of each sliding part is less than the size or dimension of the proximal end of each sliding part.

49. The method of Claim 42, wherein the method further comprises:

coupling a pump, or a source of pressure to the flexible finger.

50. The method of Claim 42, wherein the method further comprises:

coupling a motor or an actuator to the flexible finger.

51. The method of Claim 42, wherein the method further comprises:

including a polymer coupled to the flexible finger operative for converting a first form of energy to a second form of energy.

52. The method of Claim 42, wherein the method further comprises:

including a polymer coupled to the flexible finger operative for converting electrical energy to mechanical energy.

53. The method of Claim 42, wherein the method further comprises:

providing a polymer coupled to the flexible finger operative for converting one form of energy to a new form of energy and moving a fluid through the flexible finger.

54. The method of Claim 42, wherein the method further comprises:

including a polymer coupled to the flexible finger operative for converting one form of energy to a new form of energy operative for providing a peristaltic wave and moving a fluid.

55. The method of Claim 42, wherein the method further comprises:

providing a sensor coupled to or carried by the flexible finger.

56. The method of Claim 42, wherein the method comprises:

coupling an imager, a pressure sensor, a temperature sensor, a chemical sensor, a gas sensor, an electrolyte sensor, a composition sensor, a concentration sensor, or a flow sensor to the flexible finger.

57. The method of Claim 42, wherein the method comprises:

providing a wireless interface coupled to the control system.

58. The method of Claim 42, wherein the method comprises:

coupling a wireless data transmitter coupled to the control system or the flexible finger.

59. The method of Claim 42, wherein the method comprises:

coupling a wireless data receiver, or a wireless data controller to the flexible finger or the control system.

60. The method of Claim 42, wherein the method comprises:

coupling a source of a chemical, a chemical compound, a protein, a lipoprotein, a glycoprotein, a sugar, a lipid, an antigen, an antibody, a cytokine, a peptide, a neurotransmitter, a hormone, an ion, a messenger molecule, a nucleic acid, an engineered nucleic acid, a nucleic acid vector, a drug, a cell, a cell fragment, a cell organelle, a liposome, a pharmaceutical agent, a biological material, or a biological fraction internal or external to the hollow part.

61. The method of Claim 42, wherein the method comprises:

coupling a source of two or more of a chemical, a chemical compound, a protein, a lipoprotein, a glycoprotein, a sugar, a lipid, an antigen, an antibody, a cytokine, a peptide, a neurotransmitter, a hormone, an ion, a messenger molecule, a nucleic acid, an engineered nucleic acid, a nucleic acid vector, a drug, a cell, a cell fragment, a cell organelle, a liposome, a pharmaceutical agent, a biological material, or a biological fraction internal or external to the hollow part.

62. The method of Claim 1, wherein the method further comprises:

including a functional tool coupled to or carried by the flexible finger.

63. The method of Claim 62, wherein the functional tool further comprises:

including a tool positioner carried by the flexible finger.

64. The method of Claim 62, wherein the functional tool further comprises:

including a tool for ablating, degrading or liquefying a cell, a mass of cells, a tissue, or an assembly of biological materials exhibiting shear strength coupled to the flexible finger.

65. The method of Claim 62, wherein the functional tool further comprises

providing a tool for cauterizing or sealing a cell, a mass of cells, a tissue, or an assembly of biological materials exhibiting shear strength coupled to or carried by the flexible finger.

66. The method of Claim 62, wherein the method comprises:

providing a control circuit for guiding the functional tool coupled to the control circuit.

67. The method of Claim 42, wherein the method further comprises:

providing a source of an electric charge or electromagnetic radiation coupled or carried by the flexible finger.

68. The method of Claim 42, wherein the method further comprises:

providing a device for fully, partially blocking, guiding, or shunting a liquid flow coupled to the flexible finger.

69. The method of Claim 42, wherein the method further comprises:

providing a fluid dispenser coupled to or carried by the flexible finger.

70. The method of Claim 42, wherein the method further comprises:

providing a stent coupled to or carried by the flexible finger.

71. The method of Claim 42, wherein the method comprises:

forming a configuration operative for controlling, guiding or positioning the flexible part and coupled to the control system.

72. The method of Claim 42, wherein the method further comprises:

providing a processor, a logic circuit, or a feedback circuit coupled to the control system.

73. The method of Claim 42, wherein the method further comprises:

providing a processor further comprising a stored software or firmware program cooperative with the processor.

74. The method of Claim 42, wherein the method further comprises:

forming the device for perfusion management with a size, composition, shape, power dissipation level, or configuration for implantation in an animal.

75. The method of Claim 42, wherein the method further comprises:

forming the device for perfusion management having a size, composition, shape, power dissipation level, or configuration for implantation in animal wherein the animal is a human.

76. The method of Claim 42, wherein the method further comprises:

forming the device for perfusion management having a configuration for placing in a location and operative for monitoring or treating one or more physiological variables.

77. The method of Claim 76, wherein the method further comprises:

forming the device for perfusion management having a configuration for placing in the location and operative for monitoring or treating one or more physiological variables and wherein the location is a circulatory system, an abdominal aorta, a vena cava, or a nervous system.

78. The method of Claim 42, wherein the method further comprises:

forming the device for perfusion management having a configuration for monitoring or treating a response in an animal.

79. The method of Claim 42, wherein the method further comprises:

forming the device for perfusion management having a configuration for delivering a medicinal agent, a pharmaceutical agent, a therapeutic device or assembly to a location in an animal.

80. The system of Claim 42, wherein the method comprises:

configuring the device for perfusion management for communicating exterior to a patient.

81. A method for perfusion management, comprising:

storing a receivable in a cavity;

extending a tractable conduit between the cavity and a location in an animal; and

delivering the receivable to the location in the animal.

82. The method of Claim 81, wherein the method further comprises:

guiding, positioning, or directing the tractable conduit for traveling the interior of a blood vessel.

83. The method of Claim 81, wherein the method further comprises:

charging a polymer to make a wave motion and move contents of the tractable conduit or the cavity.

84. The method of Claim 81, wherein the method further comprises:

charging a polymer to perform an action.

85. The method of Claim 81, wherein the method comprises:

imaging, or detecting a level of pressure, temperature, chemical, gas, electrolyte, composition, concentration, or flow.

86. The method of Claim 81, wherein the method further comprises:

delivering chemicals, chemical compounds, proteins, lipoproteins, glycoproteins, sugars, lipids, antigens, antibodies, cytokines, peptides, neurotransmitters,

hormones, ions, messenger molecules, nucleic acids, engineered nucleic acids, nucleic acid vectors, drugs, cells, cell fragments, cell organelles, liposomes, pharmaceutical agents, biological materials, or biological fractions in proximity to the location in the animal.

87. The method of Claim 81, wherein the method further comprises:

performing one or more operations or actions.

88. The method of Claim 81, wherein the method further comprises:

positioning tools in the animal.

89. The method of Claim 81, wherein the method further comprises:

fully or partially blocking or shunting a liquid flow.

90. The method of Claim 81, wherein the method further comprises:

ablating, degrading, or liquefying a cell, a mass of cells, a tissue, or an assembly of biological materials exhibiting shear strength.

91. The method of Claim 81, wherein the method further comprises:

capturing a cell, a tissue, a fluid, a gel, a sample, a colloid, and emulsion, a debris, a contaminant, or a biological material.

92. The method of Claim 81, wherein the method further comprises:

sampling a cell, a mass of cells, a tissue, or an assembly of biological materials exhibiting shear strength.

93. The method of Claim 81, wherein the method further comprises:

cauterizing or sealing a cell, a mass of cells, a tissue, or an assembly of biological materials exhibiting shear strength.

94. The method of Claim 81, wherein the method further comprises:

dispensing a fluid at a controlled rate.

95. The method according to Claim 81, wherein the method further comprises:

controlling or guiding the tractable conduit.

96. The method according to Claim 81, wherein the method further comprises:

configuring the device for perfusion management for placing in the animal wherein the animal is a human.

97. The method according to Claim 96, wherein the method further comprises:

configuring the device for perfusion management for placing in a new location in the human.

98. The method according to Claim 81, wherein the method further comprises:

configuring the device for perfusion management for placing in a circulatory system, an aorta, in a vena cava or in a nervous system.

99. The method according to Claim 81, wherein the method further comprises:

releasing an electric current or an electromagnetic radiation in proximity to a cell, a tissue, or an assembly of biological materials exhibiting shear strength.